

# THE BONNYVILLE CLIMBING WALL PROJECT

A Community Partnership to Promote Heart Health



*St. Paul Straight from the Heart Project*

The Alberta Heart  
Health Project  
1999



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A Community Partnership to Promote Heart Health

*This manual is a product of*

*St. Paul - Bonnyville  
“Straight from the Heart Project” Project*

An initiative of the  
The Alberta Heart Health Project



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# PREFACE: THE ALBERTA HEART HEALTH PROJECT

Cardiovascular disease, the leading cause of premature death among Albertans, has a severe impact on the quality of life in Alberta. More than half of adult Albertans have an elevated risk of developing cardiovascular disease. A 1990 Alberta Heart Health Survey indicated that 57% of the adult population exhibited one or more of the three major heart health risk factors: high blood cholesterol, high blood pressure, and use of tobacco. If physical inactivity is also included as a major risk factor, the percentage of adult Albertans at risk increases to 72%. The survey also made it clear that greater heart health awareness and community involvement in heart healthy activities are needed before Albertans can take primary responsibility for preventing this disease. For these reasons, Alberta Health decided to participate in the Canadian Heart Health Initiative (CHHI), a nationwide impetus to encourage provincial health systems to explore strategies for mobilizing community resources and enhancing community participation in heart health promotion activities. The Alberta Heart Health Project (AHHP) was launched in 1993, being jointly funded by Alberta Health and Health Canada.

The primary objective of the AHHP was to promote heart-healthy lifestyles by facilitating and evaluating community-based initiatives that may reduce the cardiovascular disease risk in Alberta. The demonstration phase (1993-97) was an investigation of strategies for implementing heart health promotion activities in communities. Demonstration projects were launched in four diverse sites: a comprehensive school health project in Calgary; a large urban workplace site in the City of Edmonton; rural sites near the City of Red Deer; and the urban/rural towns of St. Paul and Bonnyville. The site teams attempted to document community involvement in heart health promotion and to better understand the elements that constitute the readiness and capability of rural and urban settings to adopt heart health initiatives. Project volunteers worked to accomplish this goal through awareness and education about heart disease, and by creating environments supportive of heart healthy lifestyles. Site teams formed partnerships with community groups and leaders to implement and sustain the shared goals for heart health promotion activities. Project researchers explored several questions: What motivates communities to become involved in heart health activity? How can community-based interventions facilitate the adoption of heart healthy lifestyles? Did the demonstration projects develop models useful to other communities?

"Straight from the Heart" was the motto of the St. Paul/Bonnyville demonstration site. This project used a community development approach to promote heart health awareness, emphasising options that teenagers and young adults have for reducing fat in the diet, for active living and for creating tobacco-free environments and active lifestyles. The results were encouraging and provide useful information about how heart health activities can be promoted by integrating vision, leadership, resources and support into the community. A tobacco reduction initiative launched by this project appears likely to diffuse throughout the Lakeland Regional Health Authority. The AHHP experience has provided Alberta Health and organizations with strategies for implementing community-based heart health initiatives as well as with knowledge for disseminating heart health promotion to Albertans. This manual has been prepared to assist health and human resource professionals in designing a climbing wall and for promoting similar exercise initiatives in the community.



# ACKNOWLEDGEMENTS

The Bonnyville Climbing Wall Project was an initiative of the St. Paul/Bonnyville "Straight from the Heart" demonstration project, and made possible by the support and contributions of individuals, businesses and community groups.

The organizing committee put in time and effort beyond the call of duty. They deserve recognition and praise for their energy and dedication to this project.

Special thanks are extended to the following individuals and groups for their inspiration and dedication:

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This manual was compiled and written by Laura Plett, St. Paul/Bonnyville Heart Health Project Coordinator. Laura received technical support from Jacqueline Hutchison and Seth Mason. Charlotte Varem-Sanders, Clare Gauvreau, Nora Johnston, Keith McLaughlin and Rudy Dressendorfer reviewed drafts and provided editorial input.

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## Disclaimer

No person named in this manual is to be held responsible for any kind of injury, loss or damage sustained in the building or use of a climbing wall.

Wall climbing is a strenuous, high-risk sport. Appropriate fitness training and supervised technical instruction can reduce-but never completely eliminate-the risk of accidents.

The following individuals, groups and businesses donated funds, materials and labour:

A&W	IGA
Alberta Sport, Recreation, Parks, and Wildlife Foundation	Imperial Oil
Alberta Power	J.D. Collision
Amoco	Kinettes
Ardmore School	Lakeland Knights of Columbus
Bend Master Fabricators Ltd.	Matichuk Equipment Ltd.
BMW Monarch	Midtown Motor Inn
Bonnyville Neighbourhood Inn	Nelson Lumber
Bonnyville Summer Games Association	Northern Lights School District
Brosseau's Department Store	Pioneer Pizza
Cam-Rod Industries Ltd.	Reid's Welding
Cedar Barn	Renaissance Energy Ltd.
Century Sales and Service	Renegade Rentals
Coca Cola Bottling Ltd.	Rental Shop Ltd
Color Your World	Sonny's Bar & Grill
Dairy Queen	Subway
Fasco Rentals	Sue Lysachok
Flint Canada Inc.	Towne Trophy and Gift
Hamel's Meats	United Woodmasters Inc.
Home Hardware	Vallee's Foods
	Vincent Building Supply



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# INTRODUCTION

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# INTRODUCTION

## Promoting Physical Activity

**Pursuing a physically-active lifestyle is thought to play an important role in maintaining heart health. Adherence to a regular exercise program seems to be enhanced when the activity is perceived as enjoyable and recreational.**

Community leaders can play a significant role in increasing interest in and opportunities for recreational physical activity. The Alberta Heart Health Project (1993-97) found that community groups and agencies can effectively develop and sustain heart health activities by providing vision, leadership, resources and support to the health system.

This manual outlines the steps involved in a community project to plan, construct and operate a climbing wall—a unique and stimulating way to encourage people of all ages to develop and maintain their physical fitness.

## The Bonnyville Experience

The information provided here was collected and compiled by the Bonnyville Heart Health committee, which began working with the community to build a climbing wall in March 1996.

The Bonnyville climbing wall project involved these steps:

1. Formation of a committee to assess the feasibility of constructing a wall.
2. Holding of public meetings to gauge the community's interest.
3. Identifying a location for the wall (the second gym of the Duclos Elementary School).

4. Hiring a firm to design and oversee construction.
5. Asking local businesses and individuals to donate money and materials (25% of the budgeted amount raised within three months).
6. Construct the wall (over a three-day weekend in November 1996 with 25-30 volunteers assisting).

The Bonnyville Climbing Wall Committee received total cash donations of \$12,700. Businesses donated construction materials valued at \$5,000 and over 6,200 hours of time were donated. The total cost of building the wall was under \$15,000. Without donations and volunteer support, the cost would have exceeded \$35,000.

Two grants also contributed to the project: one from the 1996 Alberta Summer-Games held in Bonnyville and the other from the Alberta Sport, Recreation, Parks and Wildlife Foundation.

Local restaurants and grocery and meat stores provided meals and snacks for the volunteers. Juice, coffee and snacks were available at all times during the construction phase.

A local high school teacher volunteered his Integrated Occupational Program class to drill holes in plywood sheets. Other high school students volunteered in order to meet a requirement for community service.

Over 200 people in the Bonnyville community have completed a three-hour training course in belaying. Evening instruction classes open to the public are increasing opportunities for people to learn how to climb the wall.





## Specialized Terms Used in Wall Climbing

Climbing has its own vocabulary. Commonly used special terms include:

**belay** (pronounced 'b LAY'): A means of securing a climber by using a rope and a "belay" device (pin or cleat) to prevent or minimize falling.

**belaying**: Securing a climber by use of a rope and "belay" device.

**boulder**: A large stone or rock that protrudes from the wall.

**bouldering**: Climbing without the use of a rope or belay device.

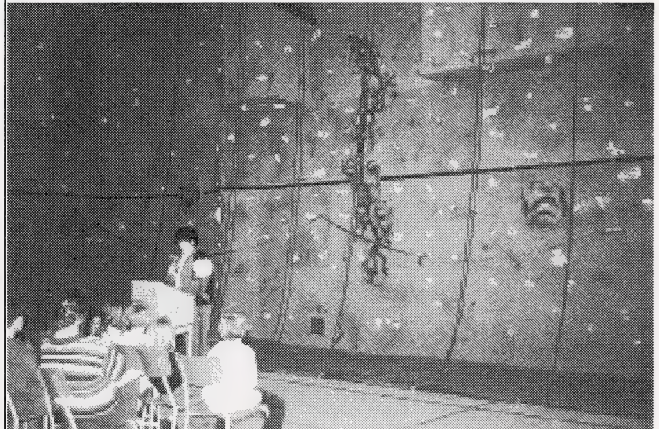
**carabiner** (pronounced 'care a BEN er'): A type of clip with a gate that opens to insert the rope or sling.

**hold**: Attachments to a climbing wall that resemble rocks and crevices.

**overhang**: A projection in the wall that increases the climbing angle beyond 90 degrees.

## The Bonnyville Climbing Wall

The Bonnyville climbing wall, which accommodates seven climbers at one time, is 20 feet high and 40 feet wide. The 40 feet are broken up by a corner, with 8 feet on one wall and the remaining 32 feet on the other. There are two overhangs—one jutting out 2 feet and the other 3 feet. The corner has an outward incline and an outward "V" on the bottom that extends about 1 foot. Advanced climbers are challenged by a crack that ranges from 8 to 13 feet, three separate boulders and a variety of holds. A black line painted at the 8-foot mark allows people to climb below that line without using ropes.



To make the wall to look as realistic as possible, plywood sheets were painted and textured to resemble the face of a cliff. Paint, cement and dye were mixed with an electric cement mixer. (A bathroom scale was used to accurately weigh the proper proportions of the ingredients.) A trowel was used to apply the mixture onto the plywood sheets before they were attached to the wall.

The Bonnyville climbing wall is a sandstone colour with red and black paint spray applied on top of the cement to provide an impression of depth.





# PLANNING

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# PLANNING

## Seeking Community Support

**To be successful, a climbing wall project needs support from all sectors of the community.**

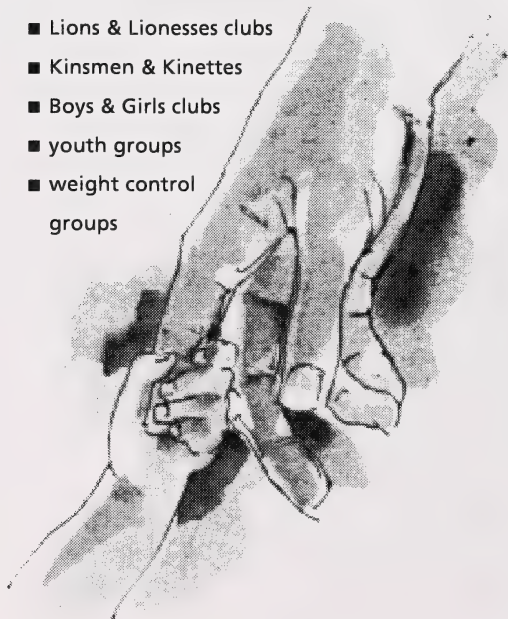
**Since building a climbing wall is not a typical undertaking for most communities, support may not be forthcoming right from the outset. However, the whole community may eventually become involved and enthusiastic if the project is carefully planned and effectively marketed.**

These are the steps to follow in seeking community support.

1. Identify the need for a climbing wall. Will it address active living and social needs in the community?
2. Engage a climbing wall designer and/or consultant early on in the planning phase. A partial list of contact names is provided in the "Resources" section of this manual.

3. Identify potential user groups. For example:

- Schools
- Lions & Lionesses clubs
- Kinsmen & Kinettes
- Boys & Girls clubs
- youth groups
- weight control groups



- sports clubs
- youth detention centres
- churches

4. Identify key leaders in potential user groups:
  - to act as ambassadors
  - to develop support
  - to promote the concept
  - to assist in planning, recruiting volunteers and obtaining funding
5. Talk to key leaders personally and follow up with a letter outlining the advantages of a climbing wall.
6. Hold a public awareness meeting:
  - arrange date and location
  - write letters of invitation to potential user groups
  - invite the community to attend, through newspaper ads, posters, public service announcements (PSAs) on radio and TV, and personal contact
7. Plan the program for the meeting.
  - invite guests from communities that have a climbing wall to discuss the benefits, frequency of use; and drawbacks or obstacles they have experienced.
  - have an objective facilitator lead a discussion of the pros and cons of building a climbing wall in your community; e.g., Alberta Community Development provides facilitators free of charge.
8. If the response at the public meeting is unfavourable at this time, skip to point 13 in this section.



9. If the response at the public meeting is favourable, ask for volunteers to:

- research climbing walls in other communities (see Appendix A) and investigate potential climbing wall locations in the community
- promote the concept of a climbing wall by emphasizing its benefits to the community
- raise funds and seek donations (materials for construction and equipment)
- recruit volunteers to construct the wall
- gather construction materials
- consult with the climbing wall designer
- plan a follow-up meeting to bring information back to the public

10. Ensure that an organization or agency is willing to assume operation and management of the climbing wall upon completion. Have an agreement in writing. **Keep in mind that operation and management of the wall are time and labour intensive, possibly not suitable for volunteers.**

11. Continue to keep the community informed of progress through newspaper articles, radio station interviews, public meetings and other media.

12. Expect some opposition.

In many cases, opponents will become allies if



you provide them with complete and accurate information about your goals, budget and supporters, as well as about successful projects in other communities. It is important to acknowledge and discuss any concerns; ignoring them will create more problems. Create an atmosphere of openness.

Some people will oppose any type of change in the community on principle. In these instances, the assistance of legal professionals may be required.

13. What if the community rejects the idea of a climbing wall initially?

Timing is important. If other issues are a priority, deal with them first. But if you still think a climbing wall would benefit the community,

continue to investigate, accumulate information, develop a list of arguments in support of a climbing wall, review your approach and talk to different people about the project. Develop a base of support, and when the time is right bring out your plan again.

## Finding a Location for the Wall

Find a place for the wall that is visible and accessible, and in an area that will permit future expansion. (This manual addresses only indoor walls.)

These are the steps to follow in finding a location for the wall.

1. Investigate a variety of potential locations in the community, such as a:
  - community centre
  - school gym
  - unused grain elevator
  - empty industrial building
  - private business or industry
2. To determine the merit of each potential location, consider:
  - community access during days, evenings, weekends, summer
  - access for schools
  - degree of support for the project by the owner or tenant(s) of the proposed building
  - how the building is constructed (see sidebar)
  - access to/availability of storage space for equipment
  - access to/availability of bathroom facilities and change rooms
  - availability of parking



Choosing a location for a climbing wall:

### Construction checklist:

- Ceiling will support the heavy pipe. ( Walls are strong enough to anchor the climbing wall.)
- Wall height is adequate to provide a sufficient climb (higher than 12 feet).
- There is potential to add on to the wall at a later date.
- Exits, vents and electrical outlets will not be blocked.
- The flooring is easy to clean. (Wall climbing shoes leave black marks.)
- Easy access to a phone in case of emergency.
- Nothing is hanging from the ceiling in the proposed location.

## Seeking Funds and In-Kind Donations

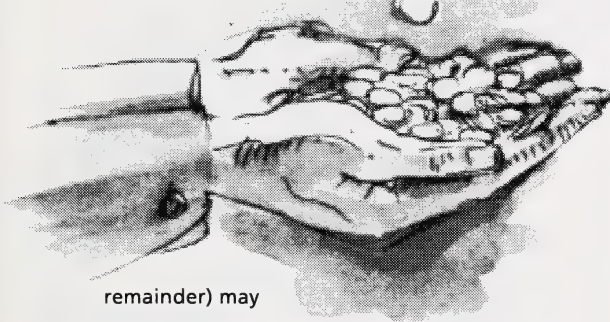
Fundraising and seeking donations of materials, time, food and labour is generally a basic component of a project of this kind. This process can be onerous, but it is necessary. Fundraising also has a spin-off benefit: it develops a sense of community ownership and achievement.



When asking for funds and donations, keep in mind that people will make their decision on the basis of benefits gained. For example, if AB Hardware is a new business in the community that needs some publicity, ask them to donate something that will provide that publicity. For example, the donation can be acknowledged on a wall plaque.

Plan to give all donors some form of publicity and/or recognition; for example, thank-you ads in the local newspaper or on local radio.

Don't make potential donors feel that they must cover the entire cost of an item. Every contribution, small or large, helps the numbers add up. A matching system (the donor provides a percentage and the project organizers put in the



remainder) may also be an effective way to raise funds.

These are the steps to follow in raising funds and seeking donations.

#### 1. Apply for grants.

Ask the local recreation department or the MLA's office for a list of available grant monies. Ask municipal government, large corporations, and the education and health systems to

provide potential contacts regarding funding opportunities. Expect to explain the value of the project and provide a detailed budget.

#### 2. Set up a volunteer team for fundraising.

Two or three successful local salespeople may be willing to market and obtain support for the climbing wall. Choose individuals who have credibility and are well known for their integrity in business transactions.

#### 3. Develop a detailed list of the materials required and the dates when they will be needed.

The wall designer can provide a list of materials needed to construct the wall. You may also want to ask for food donations to feed volunteers during the construction phase. Stating the date when you will require each item will assist donors who need to special order certain items to maintain their own stocks.

#### 4. Compile a list of potential donors.

Potential donors of materials, equipment, food, etc.

Hardware stores - hammers and nails

Lumber yards - lumber

Restaurants, caterers, grocery stores, fast food outlets - food for volunteers

Engraving shop - engraving and plates for plaques to acknowledge donors and volunteers

Cabinet makers - plaques, equipment storage cabinet

Paint store - paint and brushes

Equipment rental business - use of equipment for building

School board - scaffolding and some labour

Welding shops - welding, metal for brackets, labour to fabricate the brackets and pipe

Oilfield supply companies - galvanized pipe,  
bolts, saddle brackets  
Motels - rooms for contractor and trainers

Potential donors of labour, cash, services,  
consulting:

Service clubs Cubs/Scouts/Girl Guides, 4-H clubs  
Recreation department  
Physicians, dentists, accountants, lawyers,  
pharmacies  
RCMP

5. Ensure that sufficient funds have been raised to purchase materials **before beginning construction.**
6. Publicly acknowledge all donations (unless there are requests for anonymity) and thank donors personally.

## Developing the Design

Climbing walls come in all shapes and sizes. Some are located in warehouses while others are in school gyms. The limiting factors for the structure of the wall itself include the location (which dictates height and sometimes width), finances and the imagination of the planners.

These are the steps to follow in developing the design.

1. Consult the experts.

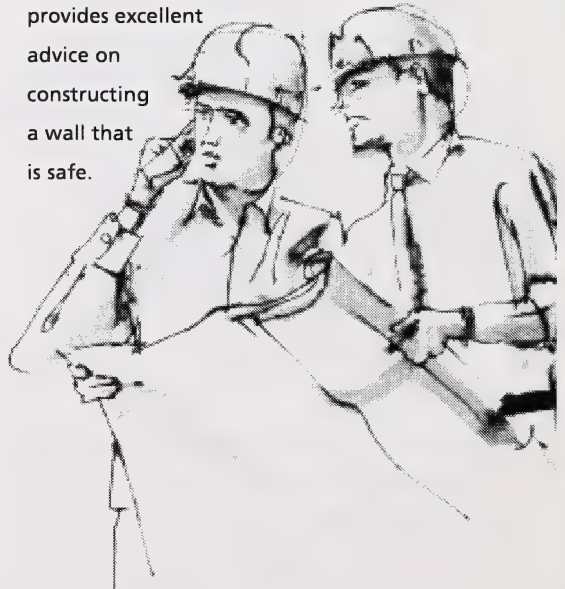
Climbing wall and mountain climbing experts are invaluable resources during all phases of building the wall. If possible, involve one or more of these people in the planning committee. Hire an experienced climbing wall consultant to design your wall and assist with its

construction. Ask for references. A partial list of consultants is provided in the "Resources" section of this manual.

2. Ensure that the wall will be both safe and challenging.

Although there are currently no provincial standards for constructing climbing walls, you will want to ensure that your wall is as safe as possible. At the same time, a well designed wall offers versatility and varying degrees of difficulty in order to challenge all climbers at all levels. Taking a look at climbing walls in other communities (see Appendix A) will give your committee ideas about how to create an interesting wall.

*Building Your Own Climbing Wall* by Thomas Ramsay (see "Resources" section of this manual) provides excellent advice on constructing a wall that is safe.





# CONSTRUCTION & SETUP

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# CONSTRUCTION & SET-UP

## Recruiting and Deploying Volunteers

**Many volunteers will be required to paint, hammer, hold and carry lumber, drill holes for T-nuts and organize food for the other volunteers. There will also be "go for" jobs, as something is always forgotten despite the most careful planning. A few volunteers will have to be highly skilled, but most will need only be willing to learn.**

These are the steps to follow in recruiting and deploying volunteers.

1. To recruit volunteers, use these and other methods:
  - Hang posters in businesses or public areas.
  - Ask friends and acquaintances to help and to tell their friends and acquaintances that volunteers are needed.
  - Put notices in school newsletters.
  - Advertise in the community newspaper and on TV and radio. (Ask about public service announcements.)
  - Ask teachers of shop classes and/or the work experience program coordinator about having students work on this project.
2. If possible, assign people to do specific jobs at scheduled times. Plan to have no more than 10 people working at one time, both to ensure the safety of volunteers and to use everyone's time efficiently. The person in charge must be familiar with the requirements of the task and able to provide a safe product. A skilled carpenter must be available on all work shifts.



3. Arrange to have food available for the work crews at meal time and during breaks.
4. Keep track of volunteers with a sign-in and sign-out sheet. This provides important data for determining costs of the project and is an excellent resource for sending notes of appreciation to volunteers when the project is completed.
5. Acknowledge the volunteers after construction is complete. Send thank-you letters and other expressions of appreciation (e.g., a free training course on how to use the completed wall).

## Preparing for Construction

These are the steps to follow in preparing for construction.

1. Prepare a list of supplies
  - Ask the wall designer to develop a list of materials (see sample list in sidebar).



- Ensure that all required construction materials are available one to two days before the date of the work blitz.
- Ask a local hardware and lumber store if they can be available after hours to provide any missing items.

**Sample list of: supplies for constructing a 20' x 40' wall:**

- 30 sheets of 3/4" spruce plywood, rough
- two sheets of 1/2" spruce plywood, rough
- five 20" x 10 spruce or fir
- 1200 feet of 2 x 4 (16-foot lengths are best)
- 1400 #10 x 2" roundhead Robertson screws
- 20 pounds of 3" nails and nail gun (or plenty of hammers)
- 10 fabricated right angle brackets
- 30 1/2" hollow wall cement anchors and washers
- 30 3' x 1/2' bolts, nuts, washers and lock washers
- one or two bags portland cement
- bag or pail of orange cement dye
- three cans of flat black spray paint
- three cans flat red spray paint
- 42' top pipe

2. Prepare a list of required equipment for constructing the wall. For example:

skillsaw	cutoff saw	sabre saw
handsaw	hand drills	drill bits
tape measures	hammers	#10 driver bits
square	level	chalk line
5-gallon pails	mixer for drill	masonry trowels
weigh scale	5/8" concrete bit	nail gun
scaffolding	ladders	extension cords
plastic drop sheets	2-3 gallon pails	coffee cans, cups,
paintbrushes	paint cleaner	small cans
		battery cable
		cleaners (to clean
		T-nut holes when
		filled with cement
		mix)

3. Erect 2" x 10" support beams to act as anchors for attaching the climbing wall framework to the existing wall (with steel brackets).

4. Drill holes in plywood sheets according to the pattern provided by the wall designer. These holes are the places for the hand/foot holds.

**These holes must be drilled before wall construction; they cannot be added after.**

Multiple holes allow hold positions to be changed, providing a variety of routes.

## Acquiring Equipment for the Wall

As in any sport, climbers prefer different brands and styles of equipment. You will need to select practical and cost-effective equipment that meets the needs of the people who use the wall regularly.

Basic equipment for a climbing wall includes ropes, harnesses, belay devices, carabiners, holds, helmets, tubular webbing, and chalk and chalk bags (see definitions on page x). Climbers may be required to provide climbing shoes, or the facility may provide them.

For information about the equipment chosen by the Bonnyville Climbing Wall Committee, see Appendix B.

**Ropes:** one approved climbing rope for each person.

If your wall accommodates seven climbers, you need seven ropes. The rope length must be double the height of the wall with an additional 5-10 feet for tying knots and belaying.

Ropes come in a variety of "stretches," and there are varying opinions about how much stretch is

required. Ropes for mountain climbers must stretch more than ropes for wall climbers.

It is cost-efficient to purchase rope by the bolt.

**Harnesses:** a minimum of two harnesses for each rope—one for the climber and one for the belayer.

If you have extra harnesses for climbers who are waiting their turn, more people will be able to climb in a specific time period. (No time is wasted getting in and out of harnesses.)

Children's full body harnesses may be needed for younger climbers.

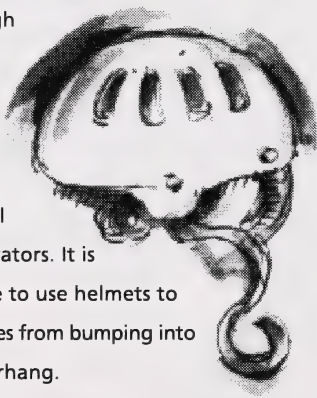
**Belay Devices:** one belay device for each rope.

**Carabiners:** one carabiner for each belayer.

**Holds:** enough variety to challenge all levels of climbers.

If the budget is tight, additional holds can be added at a later date.

**Helmets:** Although necessary in mountain climbing because of falling rocks, helmets are not favoured by all climbing wall operators. It is probably advisable to use helmets to prevent head injuries from bumping into the wall or an overhang.

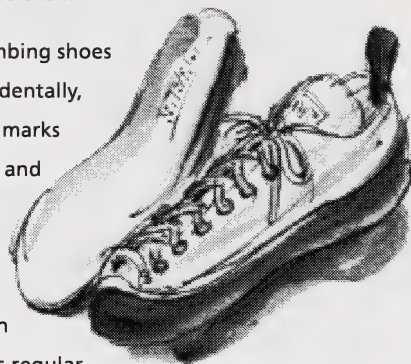


**Tubular Webbing/Floor Anchors:** Some walls use floor anchors to hold tubular webbing that attaches to the belayer's harness. This keeps the belayer on the floor in case of a fall by a climber who is heavier than the belayer.

**Lock-Up Devices:** To limit unauthorized use of the wall, consider a folding, hard plastic locking device. Or chain thick gymnasium floor mats over the wall to cover it.

**Chalk and Chalk Bags:** Chalk, which helps the hands grip the holds, can be purchased as bags, balls or loose chalk.

**Shoes:** Climbing shoes (which, incidentally, leave black marks on the wall and the floor) are fitted two sizes smaller than the person's regular shoe size. Alternatively, shoes with a thin sole and rounded toes (i.e. aqua shoes, sneakers, indoor soccer runners) can be used. Climbers need to be able to feel the holds on the wall with their feet.





# OPERATION & MAINTENANCE



# OPERATION & MAINTENANCE

## Responsibilities

**The wall is constructed and everyone is anxious to start get climbing. Just one small detail remains. Who will be responsible for operating and maintaining the wall?**

Operational and maintenance responsibilities include:

1. Scheduling times for the use of the wall and taking bookings
2. Maintaining a list of trained belayers who are available to assist private groups or during public nights
3. Promoting and advertising the wall
4. Providing training courses for belayers
5. Collecting fees
6. Setting up clubs
7. Doing regular maintenance and equipment checks
8. Developing rules and regulations for climbing safety, in consultation with the Climbing Wall Committee
9. Developing a risk management document, including waiver forms and training of staff in the use of waiver forms

This manual briefly addresses only a few of the most important operations and maintenance issues. For more information, contact the individuals and groups listed in the "Resources" section of this document.

***Do not plan to use volunteers to operate and manage the wall, as it is time and labour intensive.***

## Informing Climbers of the Basics

Climbers have to know how to belay safely, using an accepted belay device. Specifically, they need to understand:

- the belaying technique
- the calls a belayer will respond to
- how to tie a proper knot

Have climbers map out a route to take them around the wall before they start climbing. To encourage this planning, the University of Alberta climbing wall has a checklist that climbers complete before each session. The list includes:

- putting on a UIAA-approved climbing harness
- tying appropriate knots to connect the harness with the belaying rope
- appropriate use of an anchor
- general knowledge of commands and calls between the belayer and the climber
- understanding accepted belay technique

## Training Belayers

Well trained belayers, who help people climb by watching them and responding to their commands, are essential to the safe operation of a climbing wall. Therefore, it is important to hire knowledgeable, certified experts to instruct belayers.

Basic training for belaying, which takes approximately three hours, covers putting on a harness, tying different knots, appropriate hand positions and the calls for communication between the climber and the belayer. Since practice time during the session helps to develop these new skills, ask potential trainers how much practice time they provide.



Require a person who has not belayed for three months or longer to repeat the training program, and make refresher training a part of all ongoing training programs. Mention policies on refresher training in the regulations for wall use.

The “Resources” section of this manual provides information about contacting qualified trainers.

## Facility Maintenance

Check the following points before each climbing session:

1. Ropes are not broken or beginning to fray.  
(Stepping on the ends of the rope will cause strands to break.)
2. Harnesses are not fraying.
3. Wall is securely attached.
4. Holds are securely attached and not broken.
5. Carabiners are not cracked.

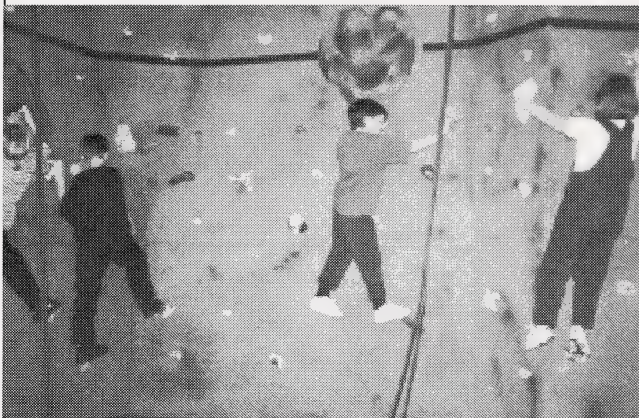
## Rules and Regulations

Develop rules and regulations for users of the facility in accordance with the needs of your community and the size of the wall.

A sample “Facility Use Guideline” is provided in Appendix B.

## Waivers

Waivers are part of a total risk management strategy, along with structural standards for a safe wall and policies on the behaviour of individuals who use the wall. Waiver agreements help to protect individuals and associations from litigation in case of accidents.



The waiver agreement, which should be checked by a lawyer, is between users of the wall and the climbing wall’s responsible parties. Purchase insurance to cover contingencies that the waiver does not cover.

## Joint Use Agreement

If the owner-operator of the climbing wall is not associated with the owner of the building where the climbing wall is located, a written joint use agreement outlining the responsibilities of each party is required. A goodwill agreement is not sufficient. Even if this type of arrangement is working with a particular individual, things could change drastically if a new person enters the picture.

If possible, have the agreement checked by a lawyer to ensure you have covered all the important areas.

# RESOURCES

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## Associations and Clubs

Alberta Sport Climbing Association

P.O. Box

Canmore, AB T0L 0M0

Ph: 403-678-2642

Fax: 403-678-4861

Alpine Club in Canmore

Box 2040, Canmore, AB T0L 0M0

Ph: 403-678-3200

Fax: 403-678-3224

American Sport Climbers Association

125 West 96th Street, #1D

New York, NY 10025

Ph/Fax: 212-865-4383

Outdoor Recreation Coalition of America

P.O. Box 1319

Boulder, CO 80306

Ph: 303-444-3353

Fax: 303-444-3284

## Businesses

Mountain Equipment Co-op

830-10 Avenue SW

Calgary, AB T2P 2X1

Ph: 403-269-2420

Fax: 403-262-5958

Mountain Equipment Co-op

12328-102 Avenue

Edmonton, AB T2P ZX1

Ph: 403-488-6614

Fax: 403-488-6771

Odyssey Recreational Adventures Ltd.

14 Oaklawn Place SW

Calgary, AB T2V 3Z1

Ph: 403-251-6777

Fax: 403-251-2733

## Climbing Wall Consultants and Trainers

This is not an exhaustive list:

Jerry Fochler

Inroads Mountain Sports

Ph: 403-963-7675

John Haigh

University of Calgary

Ph: 403-220-8028

Jacqueline Hutchison/Terry Palachuk

University of Alberta

Ph: 403-492-2767

(Ask for information about their waiver agreement.)

Troy and Jake Kreutzer

Vertically Inclined Rock Gym

Ph: 403-496-9390

Matt Lunny

Stronghold Climbing Centre

Ph: 403-276-6484

Seth Mason/Zoe Kozub

11715 - 91 Avenue

Edmonton, AB T6G 1B

Ph: 403-430-8340

Chris Miller Ph: 403-670-7815



Wendy Rockafellow  
Ascent Climbing Centre  
Ph: 403-328-7673

Association of Canadian Mountain Guides (ACMG)  
Training and Certification Program  
University College of the Caribou  
Box 3010  
Kamloops, BC V2C 5N3  
Ph: 250-372-0118  
E-mail: [ACMG@cariboobc.ca](mailto:ACMG@cariboobc.ca)

## References

Centre for Sport and Law. *Waivers and Other Agreements: A Handbook for Recreation and Sport Organizations.*

Centre for Sport and Law. *Managing Risks: A Handbook for the Recreation and Sport Professionals.*

Note: The address for the Centre for Sport and Law  
is 9758 - 90 Avenue. Edmonton AB T6E 2S9;  
fax: 403-431-0606.

Thomas, Ramsay. *Building Your Own Climbing Wall*  
(Chockstone Press, 1995). ISBN: 0934641730).  
Criteria for building a safe, sturdy climbing wall

# APPENDICES

## Appendix A. Equipment Chosen for the Bonnyville Climbing Wall Project

The Bonnyville project uses the following equipment:

- a bolt of 11 mm rope that has minimal stretch but is not static
- MAMMUT Sit harnesses that fit people of sizes XS to L and Petzl Club harnesses
- Petzl Grigri belay devices (which seem to be the choice for most climbing walls, despite their high price)
- both Screwgate and Locking Carabiners  
Screwgate is preferred because the Locking Carabiners are more difficult to manage, belayers do not like to use them and bad habits can form as they lock automatically.
- approximately 250 holds, a 13-foot crack and three 1 1/2 foot boulders (more than initially anticipated)
- adjustable bicycle helmets
- no tubular webbing/floor anchors

In Bonnyville, the rope is double-wrapped around the top pipe. This accomplishes the same goal as the floor anchors. With double wrapping, the climber can be heavier than the belayer; however, this practice wears out the rope faster.

- 2" thick gymnasium mats serve a dual purpose: when the wall is in use, they act as a cushion on the floor; when the wall needs to be locked up, the mats go against the wall and a chain is inserted through loops in the mats to lock them up.

- bags that hold chalk balls
- no climbing shoes
- Climbers use their own shoes and find they work well.

## Appendix B. Guidelines Used for the Bonnyville Community Climbing Wall

To ensure the safety of participants the following guidelines must be followed:

1. Records will be kept on all equipment.
2. Equipment checks by certified wall card holder will be done before and after use. Any equipment deficiencies must be reported immediately.
3. Wall use must be booked between 9:00 a.m. and 4:00 p.m. at the Town of Bonnyville Office.
4. Climbing wall equipment will be used exclusively for the Bonnyville Climbing Wall.
5. The individual responsible for the rental of the Climbing Wall must obtain a Wall Climbing Qualification certificate and be 16 years of age or older.
6. Waiver forms will be completed and signed prior to renting this facility.
7. A rental fee will be charged for use of the Climbing Wall to cover equipment replacement and maintenance costs. Fee: \$25.00 per rental (a rental will include three hours of use).
8. Gym must be left in the same condition it was found. Garbage must be placed in receptacles provided. No food or beverage will be permitted in the gymnasium.



9. A damage deposit of \$25.00 will be left at the time of booking the wall. The deposit will be returned upon school inspection. Any damage incurred will be the responsibility of the group.
10. Only clean indoor runner/climbing shoes will be allowed on the wall.
11. No clothing with drawstrings around the neck will be permitted when using the wall. All participants must empty their pockets before climbing.
12. In order to keep wall card current, the card holder must either use the wall every three months or demonstrate to the facility scheduler the proper knot techniques.
13. All wall climbers **must** wear a helmet when using the wall!
14. When bouldering, one's head must not go over the black line.
15. If any individual or group does not comply with the above guidelines, their climbing privileges will be revoked.









